

What is claimed is:

1. An RNA higher-order structure having a function for promoting a translation activity which is made up of a base sequence selected from the group consisting of;
 - 1) a base sequence expressed by sequences designated in Sequence Nos. 1 to 7 of the sequence list;
 - 2) a base sequence containing the base sequence of 1);
 - 3) a base sequence that has in least about 50% of homology in sequence to the base sequence of 1) and that has a function for promoting a translation activity;
 - 4) a complementary strand of the base sequences of 1) to 3);
 - 5) a base sequence hybridizing with the base sequences of 1) to 4) under stringent conditions; and
 - 6) a base sequence that has been mutated by deletion, substitution, addition, or insertion of one or more base(s) in the base sequences of 1) to 5) and that has a function for promoting a translation activity.
2. The RNA higher-order structure according to claim 1 wherein at least PK (pseudoknot) I, II, and III structures are maintained therein.
3. A recombinant vector containing a polynucleotide that is made up of any one of base sequences having a higher-order structure according to claim 1 or 2.

4. A transformant that has been transformed with the recombinant vector according to claim 3.
5. A method for synthesizing a heterologous protein or a heterologous polypeptide utilizing a polynucleotide that is made up of any one of base sequences having the higher-order structure according to claim 1 or 2.
6. The method for synthesizing a heterologous protein or a heterologous polypeptide utilizing the vector according to claim 3 or the transformant according to claim 4.
7. The method for synthesizing a heterologous protein or heterologous polypeptide, wherein the synthesis is carried out using the vector according to claim 3 in a cell-free protein synthesis system.
8. The method for synthesizing a heterologous protein or heterologous polypeptide according to claim 7, wherein the cell-free protein synthesis system uses a wheat germ extract.
9. The method for synthesizing a heterologous protein or a heterologous polypeptide according to any one of claims 5 to 8, wherein the synthesis is carried out without using AUG translation initiation codon.
10. A method for initiating synthesis of arbitrary heterologous protein or heterologous polypeptide from arbitrary codon, which comprises steps of

changing a combination of base pairs that make up a PK (pseudoknot) in the RNA higher-order structure according to claim 2; and utilizing a base sequence having the changed higher-order structure.

11. The method for initiating the synthesis of any heterologous protein or heterologous polypeptide from any codon, wherein the method comprises steps of changing one or more combination(s) of base pairs immediately upstream of the translation initiation site among combinations of base pairs that make up PK (pseudoknot) I in the RNA higher-order structure according to claim 2, and utilizing a base sequence having the changed higher-order structure.